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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/799,727

03/15/2004

Rakesh Bakshi

29250-001080/US

2065

7590 07/30/2007  
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EXAMINER

GONZALEZ, AMANCIO

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

07/30/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/799,727

Applicant(s)

BAKSHI ET AL.

Examiner

Amancio Gonzalez

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This action is in response to Applicant's amendment filed on 05/18/2007. Claims 1-16 are still pending in the present application. This action is made FINAL.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khullar et al. (US Pat 6871066), hereafter "Khullar," in view of Malladi et al. (US PGPub 20030210668), hereafter "Malladi," further in view of Persson (US 5487174 A), hereafter "Persson."

Consider claim 1, as amended, Khullar discloses a method for link quality control in a wireless communications network (**see Khullar: col. 4 lines 11-47**). Khullar

discloses implementing a control action to help prevent at least one of fading or signal cutoff between the mobile unit and at least one of the base stations (**action to protect against fading is taken –see Khullar: col. 9 lines 18-22**).

Khullar discloses link quality control, but does not particularly refer to determining whether an indicator of link imbalance exists among a plurality of base stations associated with a mobile unit. Malladi discloses an indicator of link imbalance among a plurality of base stations associated with a mobile unit (**see Malladi: Abstract; pars. 0010, 0100**).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Khullar and have it include a link imbalance indicator, as taught by Malladi, thereby mitigating deleterious effects due to link imbalance in a wireless communication system.

The combination of Khullar and Malladi teaches link quality control with a link imbalance indicator, but does not explicitly refer to the indicator of link imbalance indicating a strong forward link with respect to a first base station of a plurality of base stations and a strong reverse link with respect to a second base station of the plurality of base stations. Persson *inherently* teaches indicator of link imbalance indicating a strong forward link with respect to a first base station of the plurality of base stations and a strong reverse link with respect to a second base station of the plurality of base stations (**see the abstract, col. 4 lines 66-67, col. 5 lines 1-25, col. 9 lines 17-67, col. 10 lines 1-18, where Persson discusses separate uplink and downlink handoffs based basically on signal strength measurements for the uplink with respect to a**

**first base station of a plurality of base stations and signal strength measurements for the downlink with respect to a second base station of the plurality of base stations serving a mobile station).**

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Khullar and Malladi and have it include indicating a strong forward link with respect to a first base station of a plurality of base stations and a strong reverse link with respect to a second base station of the plurality of base stations, as taught by Persson, thereby providing means for power control of mobile stations, selection of base stations and handoff in a cellular mobile radio system having cells of substantially different sizes or base stations transmitting with substantially different output power, as discussed by Persson (see col. 1 lines 6-13).

Consider claim 2, Khullar, as modified by Malladi and Persson, teaches claim 1 above; and Malladi further discloses receiving base station information regarding the mobile unit (see Malladi: Abstract; pars 0005, 0007, 0009, 0010).

Consider claims 3, 4, 5, and 6, Khullar, as modified by Malladi and Persson, teaches claim 1 above; and Malladi further discloses link power control based on comparison of threshold values (see Malladi: Abstract; pars. 0009-0011, 0062, 0063 figs. 1, 4).

5. Claims 7, 8, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khullar et al. (US Pat 6871066), hereafter "Khullar," in view of Malladi et al. (US PGPub 20030210668), hereafter "Malladi," further in view of Persson (US

5487174 A), hereafter "Persson," as applied to claim 1 above, further in view of Saito (US PGPub 20020086709), hereafter "Saito".

Consider claims 7, 8, 10, and 12, Khullar, as modified by Malladi and Persson, teaches claim 1 above, but does not particularly refer to raising a minimum gain in base stations. Saito discloses raising a minimum gain in base stations (see Saito: par. 0064). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Khullar, as modified by Malladi and Persson, and have it include raising a minimum gain in base stations, as taught by Saito, thus increasing the transmission power of base stations when required to mitigate link imbalance in a wireless communication system.

6. Claims 9, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khullar et al. (US Pat 6871066), hereafter "Khullar," in view of Malladi et al. (US PGPub 20030210668), hereafter "Malladi," further in view of Persson (US 5487174 A), hereafter "Persson," as applied to claim 1 above, further in view of Tiedemann et al. (US PGPub 20040258024), hereafter "Tiedemann".

Consider claim 9, Khullar, as modified by Malladi and Persson, teaches claim 1 above, but does not particularly refer to sending reverse power control bits associated with strongest reverse link. Tiedemann discloses sending reverse power control bits associated with strongest reverse link (see Tiedemann: Abstract; pars. 0100, 0101). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Khullar, as modified by Malladi and Persson, and

have it include sending reverse power control bits associated with strongest reverse link, as taught by Tiedemann, thus controlling forward link power in a wireless communication system.

Consider claims 11 and 13, Khullar, as modified by Malladi and Persson, teaches claim 1 above, but does not specifically mention adjusting base station gain. Tiedemann discloses adjusting base station gain (see Tiedemann: Abstract). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Khullar, as modified by Malladi and Persson, and have it include adjusting base station gain, as taught by Tiedemann, thus controlling forward link power in a wireless communication system.

7. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khullar et al. (US Pat 6871066), hereafter "Khullar," in view of Malladi et al. (US PGPub 20030210668), hereafter "Malladi," further in view of Persson (US 5487174 A), hereafter "Persson," as applied to claim 1 above, further in view of Kikuma (US Pat 7035670), hereafter "Kikuma".

Consider claims 14-16, Khullar, as modified by Malladi and Persson, teaches claim 1 above, but does not specifically refer to end time of a control section. Kikuma discloses the end time of a control section (see Kikuma: col. 23 lines 50-67; col. 24 lines 1-14). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Khullar, as modified by Malladi and Persson, and have it disclose the end time of a control section, as taught by Kikuma,

thus timewise controlling the changing over to a different frequency –handoff- in a wireless communication system.

### ***Response to Arguments***

8. Applicant's arguments with respect to **claims** 1-16 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the combination of Khullar and Malladi as applied to the rejection of claim 1 and the subsequent dependent claims is appropriate.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not



Art Unit: 2617

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Delaney Street  
Alexandria, VA 22314

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Amancio González, whose telephone number is (571) 270-1106. The Examiner can normally be reached on Monday-Thursday from 7:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rafael Perez-Gutierrez can be reached at (571) 272-7915. The fax phone

Art Unit: 2617

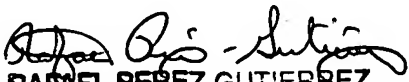
number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Amancio González  
AG/ag

July 23, 2007

  
**RAFAEL PEREZ-GUTIERREZ**  
**SUPERVISORY PATENT EXAMINER**  
7/23/07